

Natural Resource Management CTAG Survey

1. Respondent Information

April 21, 2022

Please complete the survey online by **Thursday, May 5, 2022**.

The purpose of this survey is to gather data on the current Career-Technical Assurance Guide (CTAG) courses in the area of Natural Resource Management and the courses taught at Ohio public colleges and universities that align to them. These CTAG courses are scheduled to undergo the formal revision process beginning in Fall 2022, which will include the updating of CTAG course learning outcomes as necessary and the possible identification and development of new CTAG courses in this area. This revision process is conducted as a collaboration between the Ohio Department of Education (ODE), the Ohio Department of Higher Education (ODHE), and faculty at both secondary and post-secondary institutions.

The data provided in this survey will help faculty experts and ODHE and ODE staff members to assess the degree to which the current CTAG courses reflect curricula being taught at Ohio public colleges and universities. These data will also enable us to ensure that our CTAG compliance records are up-to-date and that we can most effectively support the students of Ohio.

We ask that **one representative** complete this survey on behalf of your institution as soon as possible, but **no later than Thursday, May 5, 2022**. Please share this survey with the person most familiar with the content and subject matter.

Greg Malone, Cuyahoga Community College, is the faculty expert who will be compiling and reviewing the data from this survey. Specific questions relevant to the content components of the alignment can be addressed to him at gregory.malone@tri-c.edu with a carbon copy to Ben Parrot (bparrot@highered.ohio.gov).

We thank you in advance for your valuable input.

* 1. Demographic Information about the person completing this survey

Name	<input type="text"/>
Institution	<input type="text"/>
Department	<input type="text"/>
Title	<input type="text"/>
E-mail	<input type="text"/>
Phone	<input type="text"/>

* 2. Please indicate the type of institution that you represent

- ☐ University
- ☐ Regional Campus
- ☐ Community College

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2. Natural Resource Management Curriculum

* 3. Does your institution offer one or more courses in the area of Natural Resource Management, including Environmental Science, Field Botany, and/or Field Zoology?

☐ Yes

☐ No

3. Natural Resource Management Curriculum

* 4. Does your institution offer degree programs in the area of Natural Resource Management, including one or more courses in Environmental Science, Field Botany, and/or Field Zoology?

☐ Yes

☐ No

4. Natural Resource Management Curriculum

* 5. Which degree program(s) does your institution offer in the area of Natural Resource Management?

* 6. In which departments/divisions are these degree programs housed at your institution?
Please select all that apply.

- ☐ Biological Sciences
- ☐ Environmental Studies/Science
- ☐ Other (please specify)

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5. CTNRM001

Please review the following information for this currently approved CTAG course:

CTNRM001 - Environmental Science

General Course Description: This is a course for majors and non-majors that introduces current human-caused environmental problems such as air, water and soil pollution, wastes, chemicals and energy resources. Provides an introduction to science, the scientific method, basic biological and ecological concepts and applies these to current environmental issues. Students will investigate how different ecosystems function and respond to changes in various biological, chemical, and geological processes. Both historical and recent examples will be examined to illustrate how human activities impact natural systems and vice versa.

Credits: 3 Semester Hours

Learning Outcomes:

1. * Develop a basic understanding of the scientific method.
2. * Describe the roles of organisms in ecosystems and how populations, communities, and ecosystems change over time.
3. * Explain the cycling of matter and the flow of energy through ecosystems.
4. * Identify the various causes of current environmental issues involved in sustaining the world's human population.
5. * Describe current and historical patterns of energy production and use, and evaluate alternative forms of energy.
6. * Discuss the chief problems of supply, consumption, and pollution of our air, water, soil, and biological resources.
7. * Identify the key policies and legislation associated with environmental protection.

*Asterisk Indicates Essential Learning Outcomes

7. Are there any skill set changes or wording alterations you believe need to made to the learning outcomes in the above CTAG course? If yes, please explain below.



* 8. Does your institution offer a course that may align to the above CTAG course?

☐ Yes

☐ No

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6. CTNRM001

* 9. What is the name and number of the course at your institution that may align to CTNRM001?

* 10. How many credit hours are awarded for this course?

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7. CTNRM002

Please review the following information for this currently approved CTAG course:

CTNRM002 - Field Botany

General Course Description: The course provides students with an understanding of plant morphology, physiology, reproduction, metabolism, and the interrelationships between plants and their environment. The student will learn to identify common vascular and nonvascular plants as well as human uses and impacts of a variety of plant species.

Credits: 3 Semester Hours

Learning Outcomes:

1. * Compare and contrast basic plant morphology and physiology.
2. * Identify and describe the diversity and taxonomy of plants.
3. * Identify the impacts of plants on humans and how humans have impacted various plant species.
4. * Observe plant associations in nature and discover the basic principles of phytogeography, ecology, and conservation.
5. * Utilize resources to identify plant species.

*Asterisk Indicates Essential Learning Outcomes

11. Are there any skill set changes or wording alterations you believe need to be made to the learning outcomes in the above CTAG course? If yes, please explain below.

* 12. Does your institution offer a course that may align to the above CTAG course?

- ☐ Yes
- ☐ No

8. CTNRM002

* 13. What is the name and number of the course at your institution that may align to CTNRM002?

* 14. How many credit hours are awarded for this course?

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9. CTNRM003

Please review the following information for this currently approved CTAG course:

CTNRM003 - Field Zoology

General Course Description: The course will focus on animal identification, morphology, physiology, ecology, biogeography, and systematics of species common to the region, stressing the environmental aspects that affect their distribution. The basic principles of ecology and wildlife management are covered with emphasis on the interrelationships between an animal and its physical and biological surroundings as well as their economic impacts on society.

Credits: 3 Semester Hours

Learning Outcomes:

1. * Identify and utilize the system of invertebrate and vertebrate taxonomy.
2. * Learn the morphological and physiological characteristics of the major animal taxa.
3. * Describe the ecology and behavior of animals.
4. * Comprehend the development of evolutionary and systematic theories, and the impact of fauna on society.
5. * Utilize proper equipment and methods to sample the fauna and analyze and report the data.
6. * Utilize resources to identify local fauna.

*Asterisk Indicates Essential Learning Outcomes

15. Are there any skill set changes or wording alterations you believe need to be made to the learning outcomes in the above CTAG course? If yes, please explain below.

* 16. Does your institution offer a course that may align to the above CTAG course?

- ☐ Yes
- ☐ No

10. CTNRM003

* 17. What is the name and number of the course at your institution that may align to CTNRM003?

* 18. How many credit hours are awarded for this course?

11. Additional Comments

19. Are there additional comments that you would like to make about the current CTAG courses in Natural Resource Management?

12. Thank You!

Thank you for completing this survey.

If you have any questions regarding this survey, please contact Ben Parrot at bparrot@highered.ohio.gov.